|    | Typ<br>e | Hits    | Search Text  | DBs            | Time Stamp                      |
|----|----------|---------|--|----------------|---------------------------------|
| 1  | BRS      | 79813   | ((light near emit\$4) or<br>LED) and heat  | USPAT; JPO     | 2002/08/02<br>14:50             |
| 2  | BRS      | 1313    | ((light near emit\$4) or LED) and second near heat   | USPAT; JPO     | 2002/07/30<br>16:30             |
| 3  | BRS      | 1453    | ((light near emit\$4) or<br>LED) and (dual or double)<br>with heat                                     | USPAT; JPO     | 2002/08/02<br>23:54             |
| 4  | BRS      | 58      | ((light near emit\$4) or<br>LED) and (dual or double)<br>near heat                                     | USPAT; JPO     | 2002/07/30<br>16:31             |
| 5  | BRS      | 39      | 257/\$.ccls. and ((light near emit\$4) or LED) and (dual or double) with heat                          | USPAT; JPO     | 2002/07/30<br>16:51             |
| 6  | BRS      | 472     | (semiconductor or die or chip or IC) and ((light near emit\$4) or LED) and (dual or double) with heat  | USPAT; JPO     | 2002/07/31<br>11:00             |
| 7  | BRS      | 40      | (semiconductor or die or chip or IC) and ((light near emit\$4) or LED) same (dual or double) with heat | USPAT; JPO     | 2002/07/31<br>11:18             |
| 8  | BRS      | 150     | ((light near emit\$4) or<br>LED) same (dual or<br>double) with heat                                    | USPAT; JPO     | 2002/07/31<br>12:05             |
| 9  | BRS      | 79      | ((light near emit\$4) or LED or diode) same (dual or double) with heat near (sink)                     | USPAT; JPO     | 2002/07/31<br>12:24             |
| 10 | BRS      | 1       | "3683296".PN.  | USPAT          | 2002/07/31 12:0                 |
| 11 | BRS      | 1       | "4057101".PN.  | USPAT          | 2002/07/31 12:0                 |
| 12 | BRS      | 1       | "4092614".PN.  | USPAT          | 2002/07/31 12:0                 |
| 13 | BRS      | ļ       | "4219072".PN.  | USPAT          | 2002/07/31 12:0                 |
| 14 | BRS      | ļ       | "4228406".PN.  | USPAT          | 2002/07/31 12:1                 |
| 15 | BRS      | ļ       | "4233567".PN.  | USPAT          | 2002/07/31 12:1                 |
| 16 | BRS      |         | "4315225".PN.  | USPAT          | 2002/07/31 12:1                 |
| 17 | BRS      | <b></b> | "4393393".PN.  | USPAT          | 2002/07/31 12:1                 |
| 18 | BRS      | ļ       | "4415234".PN.  | USPAT          | 2002/07/31 12:1 2002/07/31 12:1 |
| 19 | BRS      | ļ       | "4454602".PN.  | USPAT          | 2002/07/31 12:1                 |
| 20 | BRS      | ļ       | "4573067".PN.<br>"4673030".PN.   | USPAT<br>USPAT | 2002/07/31 12:1                 |
| 21 | BRS      | 1       | 40/3030 .PIN.  | OSEAT          | 2002/07/31 12:1                 |

|    | Typ<br>e | Hits        | Search Text   | DBs        | Time Stamp          |
|----|----------|-------------|---|------------|---------------------|
| 22 | BRS      | 1           | "4709750".PN.   | USPAT      | 2002/07/31 12:1     |
| 23 | BRS      |             | "4852109".PN.   | USPAT      | 2002/07/31 12:1     |
| 24 | BRS      |             | "4881233".PN.   | USPAT      | 2002/07/31 12:1     |
| 25 | BRS      |             | "4963741".PN.   | USPAT      | 2002/07/31 12:1     |
| 26 | BRS      |             | "5005640".PN.   | USPAT      | 2002/07/31 12:1     |
| 27 | BRS      |             | "5076348".PN.   | USPAT      | 2002/07/31 12:1     |
| 28 | BRS      |             | "5105429".PN.   | USPAT      | 2002/07/31 12:1     |
| 29 | BRS      | <del></del> | "5220954".PN.   | USPAT      | 2002/07/31 12:1     |
| 30 | BRS      | 1           | "5253260".PN.   | USPAT      | 2002/07/31 12:1     |
| 31 | BRS      | 1           | "5265113".PN.   | USPAT-     | 2002/07/31 12:1     |
| 32 | BRS      | 1           | "5315154".PN.   | USPAT      | 2002/07/31 12:1     |
| 33 | BRS      | 1           | "5394427".PN.   | USPAT      | 2002/07/31 12:1     |
| 34 | BRS      | 1           | "5520244".PN.   | USPAT      | 2002/07/31 12:1     |
| 35 | BRS      | 1           | "5734672".PN.   | USPAT      | 2002/07/31 12:1     |
| 36 | BRS      | 59          | ((light near emit\$4) or LED or diode) same (dual or double) with heat near (exchanger or transfer or spreader or stiffener or dissipat\$3) | USPAT; JPO | 2002/07/31<br>12:31 |
| 37 | BRS      | 417         | ((light near emit\$4) or LED or diode) same (second) with heat near (exchanger or transfer or spreader or stiffener or dissipat\$3)         | USPAT; JPO | 2002/07/31<br>12:32 |
| 38 | BRS      | 627         | ((light near emit\$4) or LED or diode) same (two or second) with heat near (exchanger or transfer or spreader or stiffener or dissipat\$3)  | USPAT; JPO | 2002/07/31<br>13:18 |
| 39 | BRS      | 3           | "4566027"   | USPAT; JPO | 2002/07/31 13:1     |
| 40 | BRS      | 368         | ((light near emit\$4) or LED or diode) same (second) with heat near (exchanger or transfer or spreader or stiffener or dissipat\$3)         | USPAT; JPO | 2002/07/31<br>21:48 |

|    | Т        |      |  |   |                     |
|----|----------|------|--|---|---------------------|
|    | Typ<br>e | Hits | Search Text  | DBs   | Time Stamp          |
| 41 | BRS      | 1100 | (semiconductor or die or chip or IC) and (laser or diode) and (dual or double) with heat   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/01<br>20:10 |
| 42 | BRS      | 203  | (semiconductor or die or chip or IC) and (laser or diode) and (dual or double) with heat near (sink or plate or spreader)  |   | 2002/08/01<br>20:59 |
| 43 | BRS      | 123  | (semiconductor or die or chip or IC) and (laser or diode) and (dual or double) with heat near (transfer or exchanger or dissipator or stiffener)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/01<br>21:17 |
| 44 | BRS      | 1    | "5734672".PN.  | USPAT   | 2002/08/01 21:0     |
| 45 | BRS      | 69   | 257/\$.ccls. and (laser or diode or light near emitting or LED) and (double or two or dual) near heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/01<br>21:44 |
| 46 | BRS      | 1    | "4091408" and (laser or diode or light near emitting or LED) and (double or two or dual) near heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate)    | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/01<br>21:44 |
| 47 | BRS      | 0    | "3862003" and (laser or diode or light near emitting or LED) and (double or two or dual) near heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate)    | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/01<br>21:45 |

|    | Typ<br>e | Hits | Search Text   | DBs   | Time Stamp          |
|----|----------|------|---|---|---------------------|
| 48 | BRS      | 1    | "3867003" and (laser or diode or light near emitting or LED) and (double or two or dual) near heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/01<br>21:45 |
| 49 | BRS      | 2411 | 257/\$.ccls. and (laser or diode or light near emitting or LED) and heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate)                           | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/01<br>21:47 |
| 50 | BRS      | 2227 | 257/\$.ccls. and (laser or diode or light near emitting or LED) and heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate)                           | USPAT; JPO  | 2002/08/01<br>21:48 |
| 51 | BRS      | 2069 | 257/\$.ccls. and (laser or diode or light near emitting or LED) and heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate)                           | USPAT   | 2002/08/01<br>21:50 |
| 52 | BRS      | 1266 | 257/\$.ccls. and (laser or diode or light near emitting or LED) and heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate) and lead                  | USPAT   | 2002/08/02<br>16:10 |
| 53 | BRS      | 0    | "6256200" and ((light near emit\$4) or LED) and heat  | USPAT; JPO  | 2002/08/02<br>14:52 |
| 54 | BRS      | 1    | "6256200" and ((light near<br>emit\$4) or LED or laser or<br>diode) and heat  | USPAT; JPO  | 2002/08/02<br>14:53 |

|    | Typ<br>e | Hits | Search Text   | DBs   | Time Stamp          |
|----|----------|------|---|-------|---------------------|
| 55 | BRS      | 2    | "4566027" and (laser or diode or light near emitting or LED) and heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate) and lead                           | USPAT | 2002/08/02<br>17:16 |
| 56 | BRS      | 0    | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and lead near "35"<br>adj microns | USPAT | 2002/08/02<br>17:17 |
| 57 | BRS      | 0    | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and lead near "30"<br>adj microns | USPAT | 2002/08/02<br>17:18 |
| 58 | BRS      | 0    | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and lead near "25"<br>adj microns | USPAT | 2002/08/02<br>17:18 |
| 59 | BRS      | 0    | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and lead near "20"<br>adj microns | USPAT | 2002/08/02<br>17:19 |
| 60 | BRS      | 0    | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and lead near "15"<br>adj microns | USPAT | 2002/08/02<br>17:19 |

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|    | Typ<br>e | Hits  | Search Text  | DBs   | Time Stamp          |
|----|----------|-------|--|-------|---------------------|
| 61 | BRS      | 8     | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and lead near<br>microns | USPAT | 2002/08/02<br>17:24 |
| 62 | BRS      | 139   | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and lead with<br>microns | USPAT | 2002/08/02<br>18:18 |
| 63 | BRS      | 8     | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and lead near<br>microns | USPAT | 2002/08/02<br>17:57 |
| 64 | BRS      | 58    | (laser or diode or light near<br>emitting or LED) and lead<br>near microns   | USPAT | 2002/08/02<br>18:06 |
| 65 | BRS      | 57181 | 257/\$.ccls. lead near microns   | USPAT | 2002/08/02<br>18:04 |
| 66 | BRS      | 57069 | 257/\$.ccls. heat near sink and lead near microns  | USPAT | 2002/08/02<br>18:05 |
| 67 | BRS      | 57065 | 257/\$.ccls. heat near sink and lead near wire near microns  | USPAT | 2002/08/02<br>18:05 |
| 68 | BRS      | 0     | 257/\$.ccls. and heat near sink and lead near wire near microns  | USPAT | 2002/08/02<br>18:05 |
| 69 | BRS      | 2     | 257/\$.ccls. and heat near sink and wire near microns  | USPAT | 2002/08/02<br>18:06 |

| -  | Typ<br>e | Hits | Search Text  | DBs   | Time Stamp          |
|----|----------|------|--|-------|---------------------|
| 70 | BRS      | 9    | (laser or diode or light near<br>emitting or LED) and heat<br>near (transfer or exchanger<br>or dissipator or stiffener or<br>sink or spreader or slug or<br>plate) and wire near<br>microns | USPAT | 2002/08/02<br>18:07 |
| 71 | BRS      | 33   | (laser or diode or light near<br>emitting or LED) and wire<br>near microns   | USPAT | 2002/08/02<br>18:08 |
| 72 | BRS      | 1    | "5544269" and (laser or diode or light near emitting or LED) and heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate) and (lead or wire)        | USPAT | 2002/08/02<br>18:19 |
| 73 | BRS      | 1    | "5544269" and (laser or diode or light near emitting or LED) and heat near (transfer or exchanger or dissipator or stiffener or sink or spreader or slug or plate)                           | USPAT | 2002/08/02<br>18:19 |
| 74 | BRS      | 3    | "5544269"  | USPAT | 2002/08/02 18:3     |
| 75 | BRS      | 0    | 257/\$.ccls. and diameter near lead near wire near microns   | USPAT | 2002/08/02<br>18:32 |
| 76 | BRS      | 1    | diameter near lead near wire near microns  | USPAT | 2002/08/02<br>18:47 |
| 77 | BRS      | 0    | diameter with lead near wire near microns  | USPAT | 2002/08/02<br>18:32 |
| 78 | BRS      | 25   | diameter with lead near wire with microns  | USPAT | 2002/08/02<br>18:33 |
| 79 | BRS      | 4    | light near emitting and diameter with lead near wire with microns  | USPAT | 2002/08/02<br>18:39 |
| 80 | BRS      | 17   | light near emitting and diameter with lead near wire with (microns or nm or mm)  | USPAT | 2002/08/02<br>18:42 |

|     | Typ<br>e | Hits | Search Text   | DBs        | Time Stamp          |
|-----|----------|------|---|------------|---------------------|
| 81  | BRS      | 25   | diameter with lead near wire with (microns)                             | USPAT      | 2002/08/02<br>18:47 |
| 82  | BRS      | 61   | diameter near wire near microns   | USPAT      | 2002/08/02<br>19:27 |
| 83  | BRS      | 3    | "5544269"   | USPAT      | 2002/08/02 19:2     |
| 84  | BRS      | 1    | "4079404".PN.   | USPAT      | 2002/08/02 19:2     |
| 85  | BRS      | 1    | "4466696".PN.   | USPAT      | 2002/08/02 19:2     |
| 86  | BRS      | 1    | "4756591".PN.   | USPAT      | 2002/08/02 19:2     |
| 87  | BRS      | 1    | "4767174".PN.   | USPAT      | 2002/08/02 19:2     |
| 88  | BRS      | 1    | "4900118".PN.   | USPAT      | 2002/08/02 19:2     |
| 89  | BRS      | 1    | "5243671".PN.   | USPAT      | 2002/08/02 19:2     |
| 90  | BRS      | 1    | "5414787".PN.   | USPAT      | 2002/08/02 19:2     |
| 91  | BRS      | 1905 | 385/88  | USPAT      | 2002/08/02 19:3     |
| 92  | BRS      | 176  | 385/88 and heat near sink   | USPAT      | 2002/08/02 20:0     |
| 93  | BRS      | 0    | 385/88 and double near heat near sink                                   | USPAT      | 2002/08/02<br>19:55 |
| 94  | BRS      | 0    | 385/88 and (double or dual or two) near heat near sink                  | USPAT      | 2002/08/02<br>19:55 |
| 95  | BRS      | 525  | 385/\$.ccls. and heat near sink   | USPAT      | 2002/08/02<br>20:08 |
| 96  | BRS      | 2    | 385/\$.ccls. and (double or dual or two) near heat near sink            | USPAT      | 2002/08/02<br>20:09 |
| 97  | BRS      | 22   | "4605942"   | USPAT      | 2002/08/02 20:0     |
| 98  | BRS      | 0    | (light near emitting) with electrode near (gold or Au) near nm          | USPAT      | 2002/08/02<br>23:40 |
| 99  | BRS      | 0    | (light near emitting) with electrode with (gold or Au) near nm          | USPAT      | 2002/08/02<br>22:30 |
| 100 | BRS      | 1    | (light near emitting) same electrode with (gold or Au) near nm          | USPAT      | 2002/08/02<br>22:31 |
| 101 | BRS      | 3    | ((light near emitt\$3) or LED) same electrode with (gold or Au) near nm | USPAT<br>· | 2002/08/02<br>22:38 |
| 102 | BRS      | 3    | "5544269"   | USPAT      | 2002/08/02 22:3     |
| 103 | BRS      | 3    | "5544269" and laser   | USPAT      | 2002/08/02 23:3     |
| 104 | BRS      | 2    | 5544269.pn. or<br>59208788.pn.  | USPAT; JPO | 2002/08/02<br>23:31 |

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|     | Typ<br>e | Hits       | Search Text   | DBs   | Time Stamp          |
|-----|----------|------------|---|---|---------------------|
| 105 | BRS      | 13         | 5544269.pn. or<br>59208788.pn. or<br>59211252.pn. or<br>6299056.pn. or<br>6256200.pn. or<br>4091408.pn. or<br>4566027.pn. or<br>61067971.pn. or<br>6307871.pn. or<br>5834842.pn. or | USPAT; JPO  | 2002/08/02<br>23:34 |
| 106 | BRS      | 0          | (257/706 or 257/433) and (light near emitting) with electrode near (gold or Au) near nm   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/02<br>23:41 |
| 107 | BRS      | 6          | (257/706 or 257/433) and ((light near emit\$4) or LED) and (dual or double) with heat   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/02<br>23:54 |
| 108 | BRS      | 6          | (257/706 or 257/433) and ((light near emit\$4) or LED) and (dual or double) with heat   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2002/08/02<br>23:54 |
| 109 | BRS      | 1063       | 372/36  | USPAT   | 2003/11/06 14:5     |
| 110 | BRS      | 23679<br>1 | 372/36 and laser "light emitting"   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/06<br>14:54 |
| 111 | BRS      | 1267       | 372/36 and (laser or "light emitting")  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/06<br>14:55 |
| 112 | BRS      | 790        | (372/36 and (laser or "light emitting")) and (laser or "light emitting") with heat  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/06<br>14:56 |

|     | Tr.      |      |  |   |                     |
|-----|----------|------|--|---|---------------------|
|     | Typ<br>e | Hits | Search Text  | DBs   | Time Stamp          |
| 113 | BRS      | 28   | ((372/36 and (laser or "light emitting")) and (laser or "light emitting") with heat) and (laser or "light emitting") and heat with (double or dual)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/06<br>22:18 |
| 114 | BRS      | 50   | "light emitting") with heat) and (laser or "light  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;            | 2003/11/06<br>21:11 |
| 115 | BRS      | 17   | ((372/36 and (laser or "light emitting")) and (laser or "light emitting") with heat) and (laser or "light emitting") and heat with (double or dual or both near sides) and adhesive                        | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;            | 2003/11/06<br>21:22 |
| 116 | BRS      | 374  | (laser or "light emitting")<br>and heat with (double or<br>dual or both near sides) and<br>adhesive with heat  | USPAT; JPO  | 2003/11/06<br>21:35 |
| 117 | BRS      | 815  | (laser or "light emitting")<br>and heat with (double or<br>dual or both near sides) and<br>adhesive  | USPAT; JPO  | 2003/11/06<br>21:36 |
|     | BRS      |      | ( (laser or "light emitting") and heat with (double or dual or both near sides) and adhesive ) not ( (laser or "light emitting") and heat with (double or dual or both near sides) and adhesive with heat) | USPAT; JPO  | 2003/11/06<br>22:07 |
| 119 | BRS      | 2    | 5454002.pn. or 5578869.pn  | USPAT   | 2003/11/06 22:0     |

|     | Typ<br>e | Hits | Search Text  | DBs   | Time Stamp          |
|-----|----------|------|--|---|---------------------|
| 120 | BRS      | 27   | (438/122 or 257/707 or 257/712) and (laser or "light emitting") and heat with (double or dual) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/06<br>22:19 |
| 121 | BRS      | 19   | (257/713 or 257/714 or 257/715) and (laser or "light emitting") and heat with (double or dual) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/06<br>22:20 |
| 122 | BRS      | 9    | (257/716 or 257/717 or 257/718) and (laser or "light emitting") and heat with (double or dual) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/06<br>22:20 |
| 123 | BRS      | 13   | (257/719 or 257/720 or 257/721) and (laser or "light emitting") and heat with (double or dual) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/11/06<br>22:21 |